

REMARKS

Restriction Requirement

Restriction is required under 35 U.S.C. §121 and 372. The Examiner alleges that there are seven separate inventions, enumerated in seven groups as follows: Group I, claims 1, 3 – 7 and 13 – 17; Group II, claim 2; Group III, claims 17, 23, 25 – 29, 31 – 33, 52, 54 and 56; Group IV, claims 18 and 24; Group V, claims 34 – 36, 40 and 43 – 45; Group VI, claims 37 – 39 and 41 – 42; and Group VII, claim 50. The Examiner has required Applicants to elect one of the 7 groups for prosecution on the merits. The Examiner has further required election of a single disclosed species from (i) insertion sequences, as recited in claims 13, 25 and 50; (ii) mammalian target cells, as recited in claims 43 – 45; or (iii) a circular or linear first vector as recited in claims 35 and 36 as set forth on page 7 of the Office Action.

Applicants respectfully traverse the requirements for restriction and election, and submit that the requirements are improper. In particular, the Examiner has failed to apply correctly PCT Rule 13.2.

Claims are unified if they share one or more special technical features that define a contribution that the invention makes over the prior art (Rule 13.2). The assessment of unity of invention, therefore, identifies the salient technical features of the claims and then determines whether that combination of features is disclosed in a given prior art document. The Examiner has neither identified the salient technical features of the claims, nor has the Examiner determined that the combination of features is taught or suggested in the prior art.

Applying the requirements of PCT Rule 13.1, the claims of the present application have the following combination of technical features: The Examiner has restricted the

groups based on an alleged patentable distinction between a circular and linear artificial chromosome; however Groups I and II are both drawn to **production methods of mammalian artificial chromosomes**. Both methods encompass three steps that are essentially the same. In both methods, as a mammalian artificial chromosome (MAC) precursor, a first vector (circular vector or yeast artificial chromosome) and a second vector (circular vector or yeast artificial chromosome) are used. In both cases, the first vector includes a mammalian centromere sequence and supplies centromere necessary for replication and maintaining of MAC, and the second vector includes a functional sequence and becomes a source of a functional sequence incorporated into the MAC. The methods encompass a first step of introducing a first vector that consists of a YAC having a mammalian centromere sequence and a second vector comprising a functional sequence, and a second and third step that are identical.

Accordingly, the requirements for restriction and election are improper and Applicants respectfully request that the requirements be withdrawn. Moreover, there would be no burden on the Examiner in searching and examining all the claims in a single application.

Nevertheless, in compliance with the directives in the Office Action and in order to expedite prosecution of the instant application, **Applicants hereby provisionally elect, subject to the foregoing traverse, Group I, encompassing claims 1, 3 – 7 and 13 – 17, drawn to a method of producing a circular mammalian artificial chromosome.** Applicants further elect as the species (i) (insertion sequences, as recited in claims 13, 25 and 50) a lox P site.

CONCLUSION

Applicants respectfully submit that this application is in condition for allowance. If there are any remaining issues or the Examiner believes that a telephone conversation with Applicants' Attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned at the telephone number shown below.

Dated: November 1, 2007

Respectfully submitted,

By 

James E. Armstrong, IV

(Registration No.: 42,266)

EDWARDS ANGELL PALMER & DODGE
LLP

P.O. Box 55874

Boston, Massachusetts 02205

(617) 239-0100

Attorneys/Agents For Applicant